

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018428**Date Inspected:** 01-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** John Pagliero**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Section**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joint 6EPP46.5E2SE, outside the OBG section: ABF welding personnel Wen Han Yu (#6317) was performing Shielded Metal Arc Welding (SMAW). QC Inspector Jesus Cayabyab was monitoring the work.
- 2) At weld joint 7E/8E – LS- 5, inside the OBG section: ABF welding personnel Hua Qiang Hwang (#2930) was preparing the weld joint for fit up. QC Inspector John Pagliero was monitoring the work.
- 3) At weld joint 8E/9E – F, inside the OBG section: ABF welding personnel Jorge Lopez (#6149) was performing production welding using the SMAW process. QC Inspector Steve McConnell was monitoring the work.
- 4) At weld joint 8E/9E – B, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) was performing production welding using the SMAW process. QC Inspector Steve McConnell was monitoring the work.
- 5) At weld joint 8E/9E – E, inside the OBG section: ABF welding personnel Rick Clayborn (#2773) was fitting up the weld joint. QC Inspector Tony Sherwood was monitoring the work.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

At weld joint 6EPP46.5E2SE, outside the OBG section this QA Inspector observed ABF welding personnel Wen Han Yu (#6317) performing SMAW. This QA Inspector observed QC Inspector Jesus Cayabyab verify the preheat temperature was greater than the minimum specified of the Welding Procedure Specification (WPS) prior to the start of welding. When welding started this QA Inspector observed as QC Inspector Jesus Cayabyab verified the welding parameters as follows: 115 amperes using a 3.2 mm diameter E7018H4R electrode. The work observed appeared to comply with AFB-WPS-D15-1070 Rev-1.

At weld joint 7E/8E – LS- 5, inside the OBG section this QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) performing grinding on the buttered (built up) weld joint faces preparing the weld joint for fit up. This QA Inspector observed ABF welding personnel Hua Qiang Hwang (#2930) was placing ceramic behind the weld joint for backing material. QC Inspector John Pagliero was monitoring the work and accepted the fit up of the groove weld. This QA Inspector performed a visual verification and observed the work appeared to comply with ABF-WPS-D15-1012-3.

At weld joint 8E/9E – F, inside the OBG section this QA Inspector observed ABF welding personnel Jorge Lopez (#6149) performing production welding using the SMAW process. QC Inspector Steve McConnell was monitoring the work. This QA Inspector performed a verification of the welding parameters and observing the following: 121 amperes using a 3.2 mm diameter E7018H4R electrode. The welding observed appeared to comply with ABF-WPS-D15-1040B Rev-1.

At weld joint 8E/9E – B, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) performing production welding using the SMAW process. QC Inspector Steve McConnell was monitoring the work. This QA Inspector performed a verification of the welding parameters and observing the following: 120 amperes using a 3.2 mm diameter E7018H4R electrode. The welding observed appeared to comply with ABF-WPS-D15-1040B Rev-1.

At weld joint 8E/9E – E, inside the OBG section this QA Inspector observed ABF welding personnel Rick Clayborn (#2773) was on the inside of the OBG and relaying information to personnel on the outside of the OBG regarding which fit up aids (dogs) to adjust for aligning the two plates for fit up. QC Inspector Tony Sherwood was present and monitoring the work by providing offset reading using a Cambridge gauge.

Summary of Conversations:

As noted above and below. This QA Inspector had a conversation with Lead QC Inspector Bonifacio Daquinag Jr. regarding the lack of weld maps located adjacent to the weld joints indicating the status of the work. Lead QC Inspector Bonifacio Daquinag Jr. stated he would look into the issue and have personnel mark them as applicable.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Hager, Craig

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Levell,Bill

QA Reviewer